

ABSTRACT OF THE DISCLOSURE

Active suctioning is used to evacuate a fabric, film or membrane for the purpose of securing orthotic, prosthetic, or other body worn articles, including sports-related articles. In contrast to the straps and tight-fitting approaches of existing devices, the 5 inventive methods and apparatus provide for a slip-free seal to surrounding body parts, thereby simplifying construction, reducing weight, and enhancing comfort. The invention is applicable to any type of orthosis, prosthesis, foot wear, mitts, gloves, and so forth, including apparatus associated with the ankle and foot, knee, hip, back and neck, shoulder, elbow and hand.